REMARKS

Claims 1-37 were previously cancelled and claims 41 through 47 were previously added. Claims 38 through 47 are currently pending.

In the Office Action, claims 38-47 stand rejected under 35 U.S.C. 112, second paragraph, as purportedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically, the Office Action contends that claim 38 does not define clay having $3R_2$ stacking. Applicants respectfully traverse.

Applicants respectfully submit that clay having $3R_2$ stacking is clearly set forth and defined in the specification at page 4, line 34 to page 5, line 23. The specification identifies such clay as having a layered structure with a three-layer repeat (page 4, line 34 to page 5, line 1). The $3R_2$ clay structure is distinguished from a $3R_1$ clay structure by having a stronger d_{hkl} 107 reflection close to 45° 2 theta, whereas clay having $3R_1$ stacking has a stronger d_{hkl} 107 reflection close to 47° 2 theta (page 5, lines 3-7). The clay having $3R_2$ stacking also appears, according to SEM examinations, to have a structure with irregular flake-like platelets which are randomly agglomerated (page 5, lines 12-17). Moreover, the specification identifies specific examples of clay materials having $3R_2$ stacking and methods for their preparation, as disclosed in WO 01/12550, which has been incorporated by reference into the specification (page 5, lines 18-23).

In addition, a definition of clays having $3R_1$ and $3R_2$ stacking can be found from the literature, for example from: Bookin, A.S.; Drits, V.A.; "Polytype diversity of the hydrotalcite-like minerals I. Possible polytypes and their diffraction features," Clays and Clay Minerals, Vol. 41, No.5, 551-557, 1993. A copy of the article is enclosed for the Examiner's reference. Accordingly, applicants submit that one of ordinary skill in the art can discern from the specification and understand what is meant by clay having $3R_2$ stacking.

Therefore, it is respectfully requested that the rejection of claims 38-47 under 35 U.S.C. 112, second paragraph, be withdrawn.

In the Office Action, claims 38-47 stand rejected under 35 U.S.C. 102(b) as purportedly being anticipated by Hyder (WO89/03863). This rejection is respectfully traversed.

Hyder discloses cationic kaolin clays and their use as a filler in paper, as a pitch control agent in paper making, and as a coating agent in paints (page 1, lines 2-6; page 4, lines 27-31). However, nowhere does Hyder disclose a cellulosic product comprising clay having $3R_2$ stacking. Applicants submit that clays in general have $3R_1$ stacking and there is no disclosure, suggestion or indication in Hyder of clays having $3R_2$ stacking.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, as Hyder does not disclose each and every element as set forth in the present claims and does not show the identical invention in as complete detail as claimed, it is respectfully submitted that the invention according to the present claims is not anticipated by Hyder.

The differences observed between clays having $3R_2$ stacking and clays having $3R_1$ stacking, when the clays otherwise are the same, i.e. Al-Mg clays, are evident from for instance Example Nos. 2 and 5 of the present application.

In Example 2, a comparison was made between pitch adsorption characteristics of an Al-Mg cationic clay having $3R_1$ stacking, (CC-8, Süd Chemie) and an Al-Mg cationic clay having $3R_2$ stacking (CC-17, Akzo Nobel Catalyst B.V.). It is evident from Tables 2 and 3 that the clay with $3R_2$ stacking adsorbed pitch to a significantly higher degree than the clay having $3R_1$ stacking.

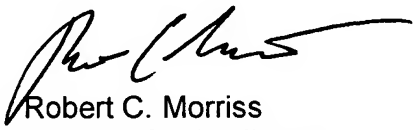
In Example 5, experimental data is presented which shows that the addition of clay having $3R_2$ stacking provides improved drainage compared to cationic clay having $3R_1$ stacking.

Therefore, based on the above, it is respectfully requested that the rejection of claims 38-47 under 35 U.S.C. 102(b) in view of Hyder be withdrawn.

CONCLUSION

Applicants respectfully submit that the application, including claims 38-47, is in proper form for allowance, which action is earnestly solicited. If resolution of any remaining issue is required prior to allowance of the application, it is respectfully requested that the Examiner contact Applicants' undersigned attorney at the telephone number provided below.

Respectfully submitted,



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